

1000

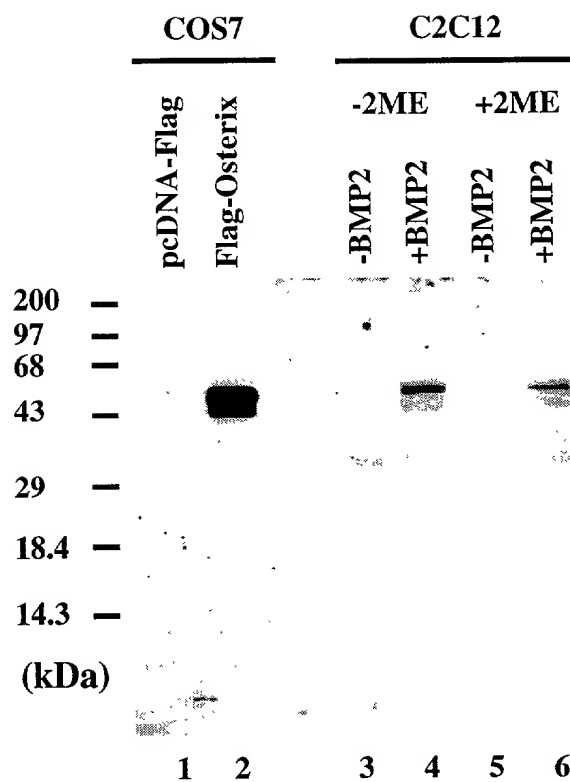


FIG. 3

Skull E16.5

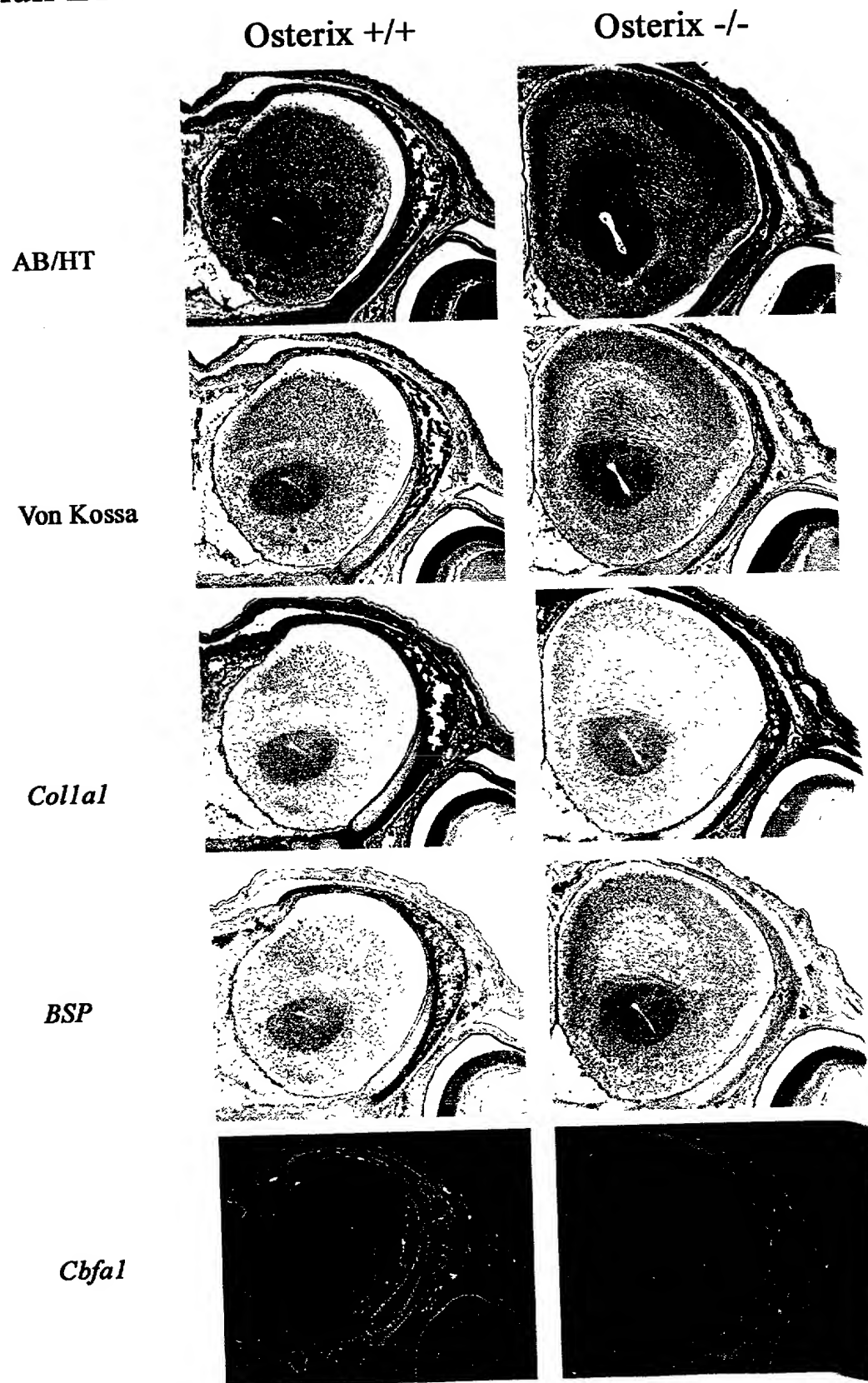


FIG. 5A

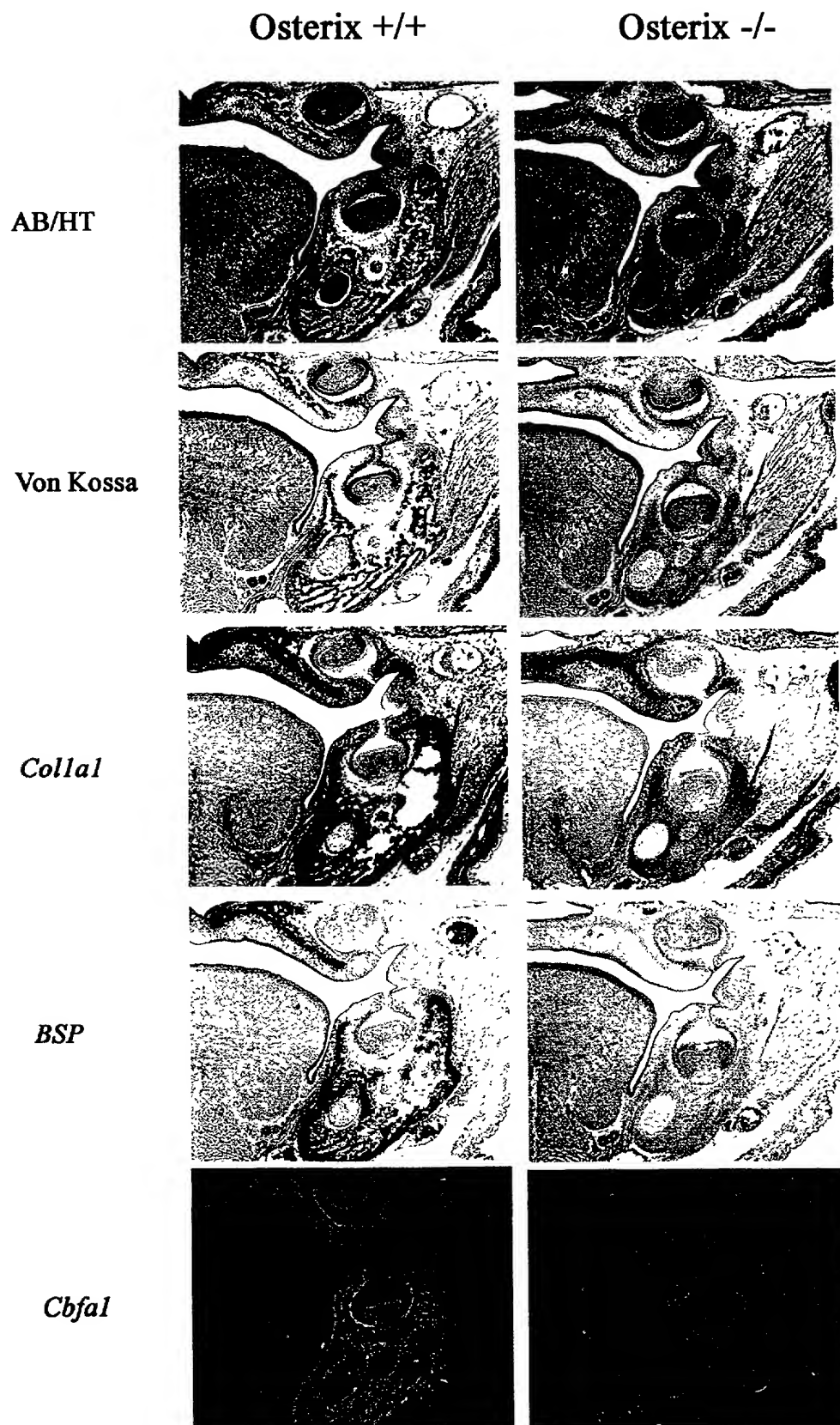
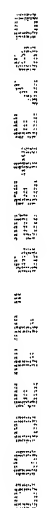


FIG. 5B

[illegible][illegible]

Demographics		Cognitive Function		Mood		Quality of Life		Health Status	
Variable	Mean (SD)	Variable	Mean (SD)	Variable	Mean (SD)	Variable	Mean (SD)	Variable	Mean (SD)
Age	65.2 (8.5)	MMSE	24.5 (2.1)	Depression	15.2 (4.8)	QoL	72.5 (12.3)	Physical Health	68.5 (15.2)
Gender	52% Male	Trail Making Test	18.5 (3.2)	Anxiety	12.5 (3.5)	QoL	75.2 (11.5)	Mental Health	71.2 (14.5)
Education	12.5 (2.5)	Digit Span	12.5 (2.5)	Stress	18.5 (4.5)	QoL	78.5 (10.5)	Overall Health	75.5 (13.5)
Income	\$15,000 (10,000)	Block Design	15.5 (3.5)	Sleep	16.5 (3.5)	QoL	81.2 (9.5)	Chronic Conditions	78.5 (12.5)
Marital Status	65% Married	Verbal Comprehension	14.5 (3.5)	Energy	14.5 (3.5)	QoL	84.5 (8.5)	Medication Use	81.2 (11.5)
Employment	45% Employed	Nonverbal Reasoning	13.5 (3.5)	Appetite	13.5 (3.5)	QoL	87.5 (7.5)	Healthcare Access	84.5 (10.5)
Living Situation	55% Alone	Matrix Reasoning	12.5 (3.5)	Weight	12.5 (3.5)	QoL	90.2 (6.5)	Healthcare Costs	87.5 (9.5)
Religion	60% Christian	Full Scale IQ	100.5 (15.5)	Smoking	10.5 (3.5)	QoL	93.5 (5.5)	Healthcare Satisfaction	90.2 (8.5)
Alcohol Use	15% Drink	Estimated IQ	102.5 (16.5)	Exercise	10.5 (3.5)	QoL	96.5 (4.5)	Healthcare Trust	93.5 (7.5)
Drugs Use	5% Use	Estimated IQ	104.5 (17.5)	Walking	10.5 (3.5)	QoL	99.2 (3.5)	Healthcare Engagement	96.5 (6.5)
Comorbidities	10% Depression	Estimated IQ	106.5 (18.5)	Driving	10.5 (3.5)	QoL	102.5 (2.5)	Healthcare Involvement	99.2 (5.5)
Healthcare Use	20% Hospital	Estimated IQ	108.5 (19.5)	Reading	10.5 (3.5)	QoL	105.2 (1.5)	Healthcare Partnership	102.5 (4.5)
Healthcare Costs	\$5,000 (3,000)	Estimated IQ	110.5 (20.5)	Writing	10.5 (3.5)	QoL	108.5 (0.5)	Healthcare Collaboration	105.2 (3.5)
Healthcare Satisfaction	75% Satisfied	Estimated IQ	112.5 (21.5)	Speaking	10.5 (3.5)	QoL	111.2 (0.5)	Healthcare Communication	108.5 (2.5)
Healthcare Trust	80% Trust	Estimated IQ	114.5 (22.5)	Listening	10.5 (3.5)	QoL	114.5 (0.5)	Healthcare Understanding	111.2 (1.5)
Healthcare Engagement	85% Engaged	Estimated IQ	116.5 (23.5)	Understanding	10.5 (3.5)	QoL	117.2 (0.5)	Healthcare Knowledge	114.5 (1.5)
Healthcare Involvement	90% Involved	Estimated IQ	118.5 (24.5)	Remembering	10.5 (3.5)	QoL	120.5 (0.5)	Healthcare Skills	117.2 (1.5)
Healthcare Partnership	95% Partnered	Estimated IQ	120.5 (25.5)	Problem Solving	10.5 (3.5)	QoL	123.2 (0.5)	Healthcare Attitudes	120.5 (1.5)
Healthcare Collaboration	98% Collaborated	Estimated IQ	122.5 (26.5)	Decision Making	10.5 (3.5)	QoL	126.5 (0.5)	Healthcare Beliefs	123.2 (1.5)
Healthcare Communication	99% Communicated	Estimated IQ	124.5 (27.5)	Planning	10.5 (3.5)	QoL	129.2 (0.5)	Healthcare Values	126.5 (1.5)
Healthcare Understanding	100% Understood	Estimated IQ	126.5 (28.5)	Organizing	10.5 (3.5)	QoL	132.5 (0.5)	Healthcare Expectations	129.2 (1.5)
Healthcare Knowledge	100% Knowledgeable	Estimated IQ	128.5 (29.5)	Managing Time	10.5 (3.5)	QoL	135.2 (0.5)	Healthcare Goals	132.5 (1.5)
Healthcare Skills	100% Skilled	Estimated IQ	130.5 (30.5)	Managing Money	10.5 (3.5)	QoL	138.5 (0.5)	Healthcare Outcomes	135.2 (1.5)
Healthcare Attitudes	100% Positive	Estimated IQ	132.5 (31.5)	Managing Stress	10.5 (3.5)	QoL	141.2 (0.5)	Healthcare Impact	138.5 (1.5)
Healthcare Beliefs	100% Believed	Estimated IQ	134.5 (32.5)	Managing Emotions	10.5 (3.5)	QoL	144.5 (0.5)	Healthcare Legacy	141.2 (1.5)
Healthcare Expectations	100% Expected	Estimated IQ	136.5 (33.5)	Managing Relationships	10.5 (3.5)	QoL	147.2 (0.5)	Healthcare Future	144.5 (1.5)
Healthcare Goals	100% Goal-oriented	Estimated IQ	138.5 (34.5)	Managing Life	10.5 (3.5)	QoL	150.5 (0.5)	Healthcare Hope	147.2 (1.5)
Healthcare Outcomes	100% Outcomes-oriented	Estimated IQ	140.5 (35.5)	Managing World	10.5 (3.5)	QoL	153.2 (0.5)	Healthcare Faith	150.5 (1.5)
Healthcare Legacy	100% Legacy-oriented	Estimated IQ	142.5 (36.5)	Managing Universe	10.5 (3.5)	QoL	156.5 (0.5)	Healthcare Love	153.2 (1.5)
Healthcare Future	100% Future-oriented	Estimated IQ	144.5 (37.5)	Managing Everything	10.5 (3.5)	QoL	159.2 (0.5)	Healthcare Joy	156.5 (1.5)
Healthcare Hope	100% Hopeful	Estimated IQ	146.5 (38.5)	Managing All	10.5 (3.5)	QoL	162.5 (0.5)	Healthcare Peace	159.2 (1.5)
Healthcare Faith	100% Faithful	Estimated IQ	148.5 (39.5)	Managing Everything	10.5 (3.5)	QoL	165.2 (0.5)	Healthcare Happiness	162.5 (1.5)
Healthcare Love	100% Loving	Estimated IQ	150.5 (40.5)	Managing All	10.5 (3.				

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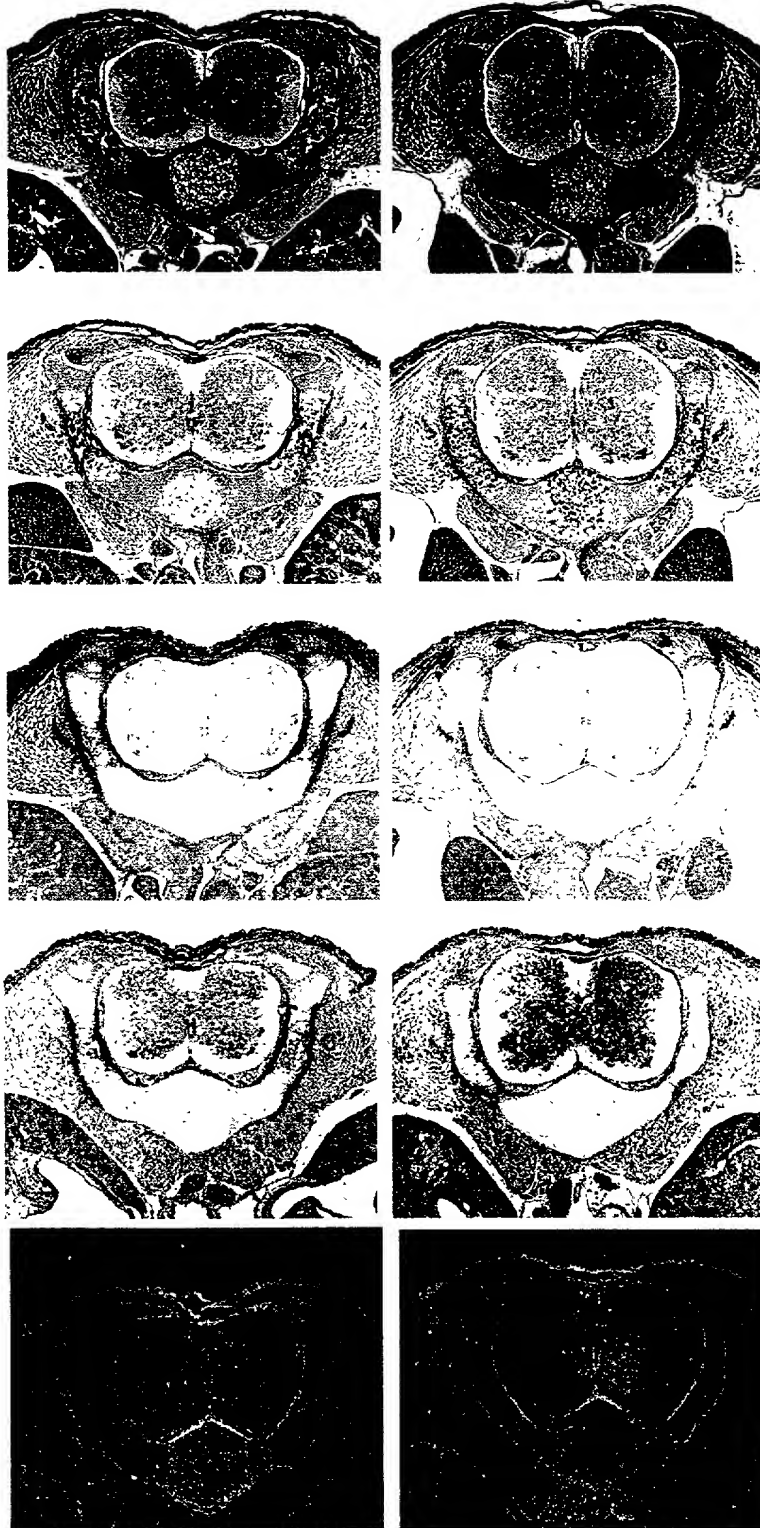
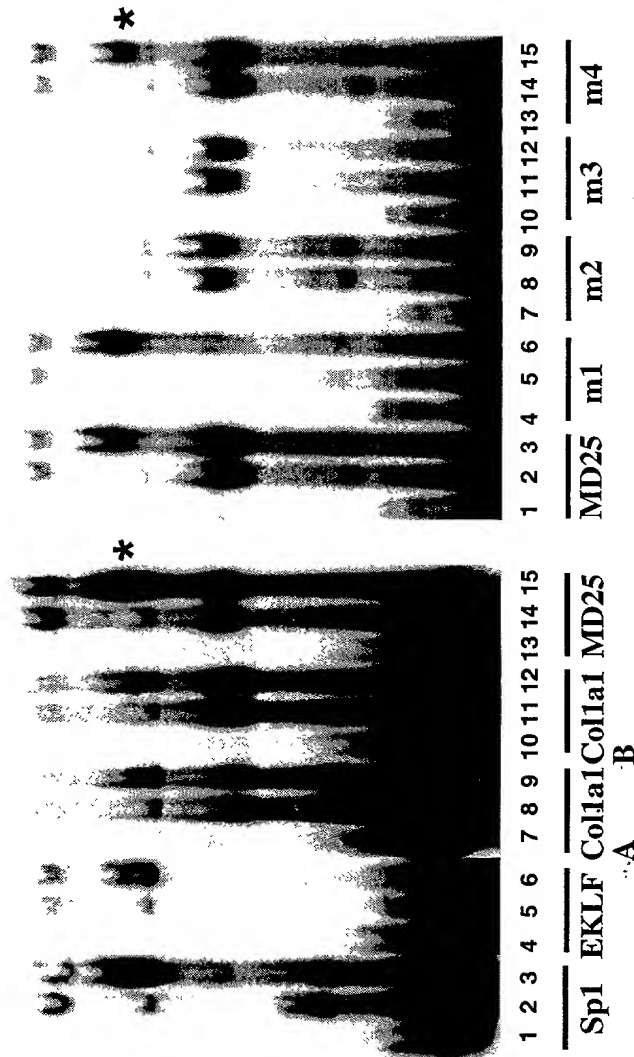


FIG. 5D

A

B



Sp1 EKLF Col1a1Col1a1 MD25

B
A

B

MD25 ml

m2

m3

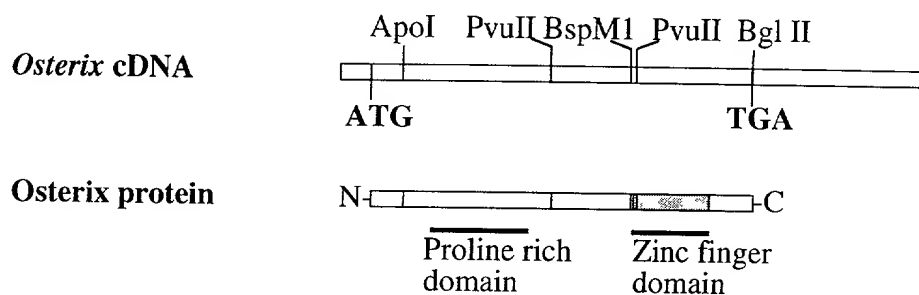
m4

FIG. 6A

FIG. 6B

FIG. 7A

A



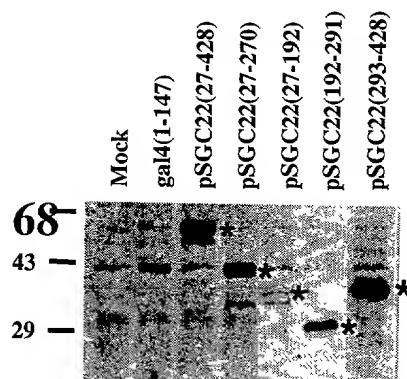
B

FIG. 7B

Constructs		Transcriptional activity
gal4(1-147)		1.0
pSGC22(27-428)		3.0
pSGC22(27-270)		127.3
pSGC22(27-192)		68.4
pSGC22(192-291)		0.6
pSGC22(293-428)		0.5

FIG. 7C

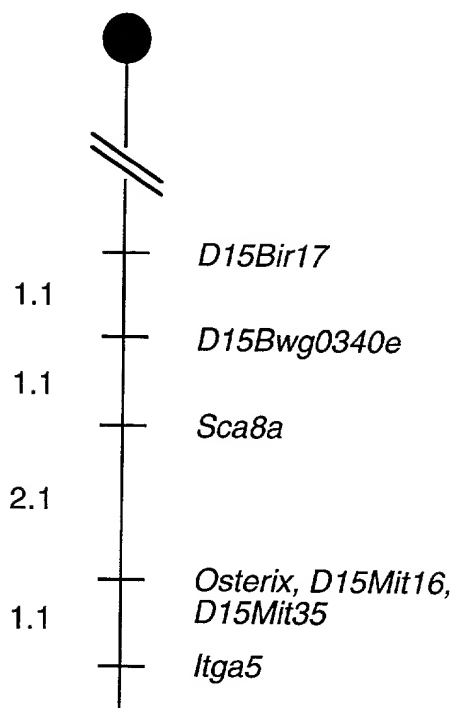
C



A

BSS Chromosome 15

FIG. 8A



B

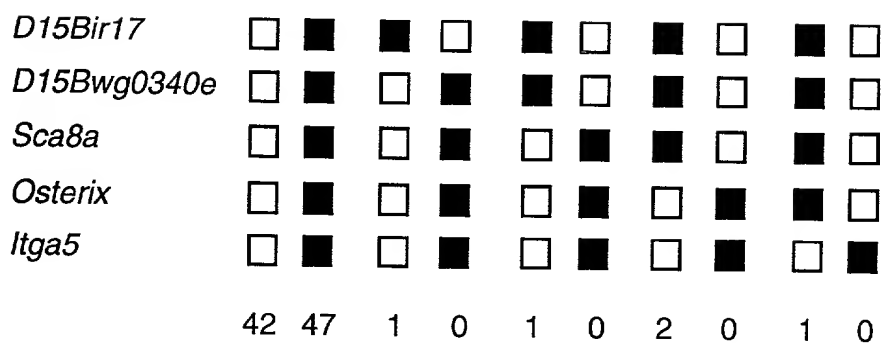


FIG. 8B

FIG. 10